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**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**



Declaration
Submitted
with Initial
Filing

OR



Declaration
Submitted after Initial
Filing (surcharge
(37 CFR 1.16 (e))
required)

Attorney Docket Number

2001-IP-004018

First Named Inventor

Paul D. Lord

COMPLETE IF KNOWN

Application Number

Filing Date

Art Unit

Examiner Name

As the below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

High Temperature Seawater-Based Cross-Linked Fracturing Fluids and Methods

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

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DECLARATION — Utility or Design Patent Application

Direct all correspondence to: ☒ Customer Number or Bar Code Label OR ☒ Correspondence address below

Robert A. Kent

Name

Halliburton Energy Services

Address

P.O. Box 1431

Duncan
City

Oklahoma
State

73536-0440
ZIP

USA
Country

580-251-3125
Telephone

580-251-3917
Fax

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR : ☐ A petition has been filed for this unsigned inventor

Given Name Paul D.
(first and middle [if any])

Family Name Lord
or Surname

Inventor's
Signature

Paul D. Lord

Date

3/25/02

Duncan
Residence: City

Oklahoma
State

USA
Country

USA
Citizenship

2 Canterbury Lane

Mailing Address

Duncan
City

Oklahoma
State

73533
ZIP

USA
Country

NAME OF SECOND INVENTOR: ☐ A petition has been filed for this unsigned inventor

Given Name John
(first and middle [if any])

Family Name Terracina
or Surname

Inventor's
Signature

John Terracina

Date

3/25/02

Duncan
Residence: City

Oklahoma
State

USA
Country

USA
Citizenship

1004 Oakview

Mailing Address

Duncan
City

Oklahoma
State

73533
ZIP

USA
Country

☐ Additional inventors are being named on the _____ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY OR
AUTHORIZATION OF AGENT**

Application Number	
Filing Date	
First Named Inventor	Paul D. Lord, et al
Title	High Temperature Seawater
Art Unit	
Examiner Name	
Attorney Docket Number	2001-IP-004018U1D1

I hereby appoint:

☐ Practitioners at Customer Number
Place Customer
Number Bar Code
Label here

OR

☒ Practitioner(s) named below:

Name	Registration Number
See attached	

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number.
Place Customer
Number Bar Code
Label here

OR

<input type="checkbox"/> Firm or Individual Name					
Address					
Address					
City		State		Zip	
Country					
Telephone		Fax			

I am the:

☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).**SIGNATURE of Applicant or Assignee of Record**

Name	Robert A. Kent		
Signature	<i>Robert A. Kent</i>		
Date	8-15-03	Telephone	580-251-3125

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) inside this box → ☐

PTO/SB/02C (1-87)

Approved for use through 5/30/98. OMB 0851-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION

REGISTERED PRACTITIONER INFORMATION (Supplemental Sheet)

Name	Registration Number	Name	Registration Number
Halliburton Energy Services, Inc. Practitioners		McAfee & Taft Practitioners	
William E. Shull	29,438	C. Clark Dougherty, Jr.	24,208
Michael D. McCully	29,566	Clifford C. Dougherty, III	31,607
Mark A. Smith	30,220	E. Harrison Gilbert, III	29,156
William M. Imwalle	35,904	Neal R. Kennedy	31,383
Paul I. Herman	37,349	Michael J. LaBrie	39,507
Robert A. Kent	28,626	Anthony L. Rahhal	37,562
Craig W. Roddy	36,256	Jean L. Pinkston	45,014
John W. Wustenberg	35,415	William D. Hall	35,535

Random Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Declaration — Registered Practitioner Information (Supplemental Sheet) (PTO/SB/02C)(1-1.4)

DECLARATION**ADDITIONAL INVENTOR(S)**
Supplemental Sheet
Page 1 of 1**Name of Additional Joint Inventor, if any:**☐ A petition has been filed for this unsigned inventorGiven
Name BillyFamily Name
or Surname SlabaughInventor's
Signature *Billy Slabaugh*

Date

3-25-02

Marlow
Residence: CityOK
StateUSA
CountryUSA
CitizenshipRt. 2, Box 485A
Mailing Address

Mailing Address

City Marlow

OK
State73055
ZIPUSA
Country**Name of Additional Joint Inventor, if any:**☐ A petition has been filed for this unsigned inventorGiven
NameFamily Name
or SurnameInventor's
Signature

Date

Residence: City

State

Country

Citizenship

Mailing Address

Mailing Address

City

State

ZIP

Country

Name of Additional Joint Inventor, if any:☐ A petition has been filed for this unsigned inventorGiven
NameFamily Name
or SurnameInventor's
Signature

Date

Residence: City

State

Country

Citizenship

Mailing Address

Mailing Address

City

State

ZIP

Country

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Paul D. Lord, et alApplication No./Patent No.: Unknown Filed/Issue Date: Concurrently HerewithEntitled: High Temperature Seawater-Based Cross-Linked Fracturing Fluids and MethodsHalliburton Energy Services, Inc., a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or2. ☐ an assignee of less than the entire right, title and interest.The extent (by percentage) of its ownership interest is _____ %
in the patent application/patent identified above by virtue of either:A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 012984, Frame 0733, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.☐ Additional documents in the chain of title are listed on a supplemental sheet.☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

8-15-03

Date

580-251-3125

Telephone number

Robert A. Kent

Typed or printed name

Robert A. Kent

Signature

Senior Counsel

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



R

AUG 14 2002

AUGUST 14, 2002

HALLIBURTON ENERGY SERVICES
ROBERT A. KENT
2600 SOUTH 2ND STREET
DUNCAN, OK 73536

PTAS ROBERT A. KENT
PATENT DEPARTMENT

Chief Information Officer
Washington, DC 20231
www.uspto.gov



102126103A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 06/11/2002

REEL/FRAME: 012984/0733
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
LORD, PAUL D.

DOC DATE: 03/25/2002

ASSIGNOR:
TERRACINA, JOHN

DOC DATE: 03/25/2002

ASSIGNOR:
SLABAUGH, BILLY

DOC DATE: 03/25/2002

ASSIGNEE:
HALLIBURTON ENERGY SERVICES, INC.
10200 BELLAIRE BLVD.
HOUSTON, TEXAS 77072

SERIAL NUMBER: 10107888
PATENT NUMBER:

FILING DATE: 03/26/2002
ISSUE DATE:

012984/0733 PAGE 2

KIMBERLY WHITE, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

06-18-2002



Document ID NO.: 102043871

102126103

Form PTO-1595
(Rev. 03/01)
**RECORDATION FORM COVER SHEET
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U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Paul D. Lord
John Terracina
Billy Slabaugh

6-11-02

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: March 25, 2002

2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: _____

Street Address: 10200 Bellaire Blvd.

City: Houston State: TX Zip: 77072

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s) _____

B. Patent No.(s) _____

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Robert A. Kent

Internal Address: Halliburton Energy Services

Street Address: 2600 South 2nd Street

City: Duncan State: OK Zip: 73536

6. Total number of applications and patents involved: ☐ 1

7. Total fee (37 CFR 3.41).....\$ 40.00

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

08-0300

 OFFICE OF PATENT RECORDS
 707 JUN 11 AM 10:46
 FINANCE SECTION

DO NOT USE THIS SPACE

9. Signature.

Robert A. Kent

Name of Person Signing

Signature

Date

6-4-02

Total number of pages including cover sheet, attachments, and documents: ☐ 3

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

06/18/2002 LMUELLER 00000064 080300 KENT R

01 FD:581

40.00 CH

ASSIGNMENT

Whereas, We, Paul D. Lord of Stephens County, Duncan, Oklahoma, John Terracina of Stephens County, Duncan, Oklahoma and Billy Slabaugh of Stephens County, Marlow, Oklahoma, have invented "High Temperature Seawater-Based Cross-Linked Fracturing Fluids and Methods" for which we have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application first executed on March 25, 2002, submitted concurrently herewith, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this 25 day of March, 2002, at Duncan, Stephens County, Oklahoma U.S.A.

Paul D. Lord
Signature

State of Oklahoma)
) ss
County of Stephens)

Before me personally appeared said Paul D. Lord and acknowledged the foregoing instrument to be his free act and deed this 25th day of March, 2002.

Seal

Sammy Knight
(Notary Public)
Feb. 13, 2006

Executed this 25 day of March, 2002, at Duncan, Stephens County, Oklahoma U.S.A.

John Terracina
Signature

State of Oklahoma)
) ss
County of Stephens)

Before me personally appeared said John Terracina and acknowledged the foregoing instrument to be his free act and deed this 25th day of March, 2002.

Seal

Sammy Knight
(Notary Public)
Feb 13, 2006

Executed this 25 day of March, 2002, at Duncan, Stephens County, Oklahoma U.S.A.

Billy Slabaugh
Signature

State of Oklahoma)
) ss
County of Stephens)

Before me personally appeared said Billy Slabaugh and acknowledged the foregoing instrument to be his free act and deed this 25th day of March, 2002.

Seal

Sammy Knight
(Notary Public)
Feb 13, 2006